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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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09/842,896

04/27/2001

Masaharu Hayashi

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EXAMINER

PRYOR, ALTON NATHANIEL

ART UNIT

PAPER NUMBER

1616

NOTIFICATION DATE

DELIVERY MODE

12/24/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

| | | | |
|------------------------------|--------------------------------------|---------------------------------------|--|
| Office Action Summary | Application No. 09/842,896 | Applicant(s) HAYASHI ET AL. | |
| | Examiner ALTON N. PRYOR | Art Unit 1616 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10,16,18,30 and 31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10,16,18,30 and 31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicant's arguments, see paper, filed 9/21/09, with respect to the rejection(s) of claim(s) under 102(b) and 103 have been fully considered and are persuasive.

Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made below. Previous rejections and other issues not addressed below are withdrawn.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10,16,18,30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hazen (USPN 4966728; 10/30/90), Welebir (Effective crop yield enhancing formulations containing fatty acids, fatty esters and calcium +2, Instrum. Anal. Foods: Recent Prog., Proc. Symp. Int. Flavor Conf., 3rd, 1983, vol. 1, pp. 339-55) and Kitzke et al. (USPN 3312542; 4/4/67). Hazen suggests a herbicidal composition comprising an alkanol ester of fatty acid (abstract) plus a nitrogen source such as ammonium sulfate and ammonium phosphate (column 5 lines 5-24) plus a surfactant containing oxyethylene and higher oxyalkylene residues, a polyoxyethylated aliphatic alcohol (column 2 lines 1-18). Hazen teaches a method of applying the composition to plants in order to control weed growth. Hazen does not teach an invention comprising 0.01-500 ppm fatty acid. Welebir suggests a method of increasing the yield of plants

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comprising applying to the plants a composition comprising 0.01 to 0.1 micromolar of a C12 to C22 fatty acids calcium salt plus a fertilizer (pp. 339-341, 353). Note, calcium is a plant nutrient. Kitzke et al. suggest a method of applying a composition comprising polyalkoxylated derivatives of ricinoleic acid triglycerides plus high boiling oils such as castor oil and olive oil to plants in order to enhance the growth of the plant. It would have been obvious to combine the individual teachings to arrive at a single invention comprising applying to plants a composition comprising C12 to C22 fatty acids, polyoxyethylated aliphatic alcohol plus a fertilizer. One would have been motivated to do this, because the individual references share a common utility, i.e. enhancing plant growth. With respect to the concentration of fatty acid, no data are provided to cover and convincingly support the broad range of fatty acids (C13 to C29 fatty acids) claimed as well as the broad concentration range of 0.01 to 500 ppm. On page 2 of the Declaration dated 1/21/05 unexpected data are provide for 60 and 500 ppm C18 as opposed to 980 ppm and 2550 ppm C18 acid. On page 31 of the specification data are provided for 30 ppm and 15 ppm myristic acid, 30 ppm stearic acid, 30 ppm oleic acid, 30 ppm behenic acid and 30 ppm melissic acid compared to acetic acid and propionic acid rather than fatty acids immediately out of the C13 to C29 range (e.g. C12 and C30 fatty acids). On pages 33-34 of the specification data are provided for 50 ppm and 100 ppm stearic acid compared to acetic acid, propionic acid and caprylic acid rather than fatty acids immediately out of the C13 to C29 range (e.g. C12 and C30 fatty acids). On page 35 of the specification data are provided for 30 ppm palm oil compared to glycerol rather than a fatty acid out side of the range of C13 to C29. On page 36 of the

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specification data are provided for 100 ppm tallow compared to glycerol rather than fatty acids outside of the range of C13 to C29. On pages 37 and 38 of the specification data are provided for 100 ppm tallow compared to glycerol rather than a fatty acid outside of the range of C13 to C29. Note, the results provided by the specification and declaration also do not cover the broad concentration range of 0.01 ppm to 500 ppm fatty acid. Claimed acids should be tested outside of this range on both sides of the range. For the above reasons, the results provided in the Declaration and specification are not convincing and do not overcome the prior art cited.

Claims 10,16,18 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Welebir (Effective crop yield enhancing formulations containing fatty acids, fatty esters and calcium +2, Proceedings – Plant Growth Regulation Society of America, 1984, 11th, 270-5). Welebir suggests a method of increasing the yield of plants comprising applying to the plants a composition comprising 0.01 to 0.1 micromolar of a C4 to C36 fatty acids calcium salt plus a fertilizer (pp. 270-273). Note, calcium is a plant nutrient. Welebir teaches that the composition can be applied to the plants as a mist (an aerosol). Welebir does not exemplify an invention wherein a composition comprising 0.01 to 0.1 micromolar of a C4 to C36 fatty acids calcium salt plus a fertilizer is applied to plants. However, Welebir suggests such an invention. Thus, Welebir makes the instant invention obvious. With respect to the concentration of fatty acid, no data are provided to cover and convincingly support the broad range of fatty acids (C13 to C29 fatty acids) claimed as well as the broad concentration range of 0.01 to 500 ppm. On page 2 of the Declaration dated 1/21/05 unexpected data are provide

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for 60 and 500 ppm C18 as opposed to 980 ppm and 2550 ppm C18 acid. On page 31 of the specification data are provided for 30 ppm and 15 ppm myristic acid, 30 ppm stearic acid, 30 ppm oleic acid, 30 ppm behenic acid and 30 ppm melissic acid compared to acetic acid and propionic acid rather than fatty acids immediately out of the C13 to C29 range (e.g. C12 and C30 fatty acids). On pages 33-34 of the specification data are provided for 50 ppm and 100 ppm stearic acid compared to acetic acid, propionic acid and caprylic acid rather than fatty acids immediately out of the C13 to C29 range (e.g. C12 and C30 fatty acids). On page 35 of the specification data are provided for 30 ppm palm oil compared to glycerol rather than a fatty acid out side of the range of C13 to C29. On page 36 of the specification data are provided for 100 ppm tallow compared to glycerol rather than fatty acids out side of the range of C13 to C29. On pages 37 and 38 of the specification data are provided for 100 ppm tallow compared to glycerol rather than a fatty acid out side of the range of C13 to C29. Note, the results provided by the specification and declaration also do not cover the broad concentration range of 0.01 ppm to 500 ppm fatty acid. Claimed acids should be tested outside of this range on both sides of the range. For the above reasons, the results provided in the Declaration and specification are not convincing and do not overcome the prior art cited.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140

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F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 10,16,18,30 and 31 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-24 of U.S. Patent No. 6849576. Although the conflicting claims are not identical, they are not patentably distinct from each other because USPN '576 suggest in the claims a composition comprising 1 to 500 ppm lipid plus surfactant plus chelating agent plus fertilizer. USPN '576 teaches a method of assisting the growth of a plant comprising applying to the plant the composition. The claims in USPN '576 and the instant claims differ in scope. Thus, the USPN '576 makes obvious the instant invention.

Telephonic Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALTON N. PRYOR whose telephone number is (571)272-0621. The examiner can normally be reached on 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Alton N. Pryor/
Primary Examiner, Art Unit 1616